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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,084	03/10/2005	Masahiko Nishimoto	71971-155	2823
20277	7590	11/14/2006	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			RIVERO, MINERVA	
			ART UNIT	PAPER NUMBER

2627

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,084

Applicant(s)

NISHIMOTO ET AL

Examiner

Minerva Rivero

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In the Remarks filed 8/15/06, Applicants amended claims 1 and 4, added claims 9 and 10, and submitted arguments for allowability of pending claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Komma *et al.* (US Patent 6,928,035).
4. Regarding claims 1 and 4, Komma *et al.* disclose an optical pick-up comprising:
a first semiconductor laser for emitting a light beam of a first wavelength (Col. 20, Lines 47-56);

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a second semiconductor laser for emitting a light beam of a second wavelength, the second wavelength being different from the first wavelength (Col. 20, Lines 47-56);

a diffraction grating for dividing any one of the light beam emitted by the first semiconductor laser and the light beam emitted by the second semiconductor laser into a 0th order main beam and the $\pm 1^{\text{st}}$ order sub-beams by an optical information recording medium (Col. 3, Lines 38-42; Col. 9, lines 65-67);

a hologram element for diffracting reflected light generated by reflecting any one of the light beam of the first wavelength and the light beam of the second wavelength by an optical information recording medium (Col. 20, Lines 12-14, 17 and 23-27);

a hologram element for diffracting reflected light generated by reflecting the 0th order main beam and the $\pm 1^{\text{st}}$ order sub-beams by an optical information recording medium (Col. 20, Lines 12-14, 17 and 23-27; Col. 9, Lines 65-67); and

a plurality of photodetectors for receiving the diffracted light from the hologram element (*photodetecting portions*, Col. 20, Lines 13-14, see Fig. 5, elements 81-83);

wherein the hologram element is divided into two or more different diffraction regions by one or more dividing lines passing through a center of the hologram element (Col. 21, Lines 34-39),

the plurality of photodetectors are provided away from the first semiconductor laser and the second semiconductor laser, at least two or more of the plurality of the photodetectors being provided respectively at one side of the both sides and at the other side of the both sides opposite to the one side along an extended line of a line between a light emission position of the first semiconductor laser and a light emission

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position of the second semiconductor laser, (Col. 20, Lines 39-41; Col. 21, Lines 21-27, see Fig. 5, elements 81-83 and 1a-b);

photodetectors for receiving the diffracted light generated from the 0th order main beam by the hologram element are provided away from the first semiconductor laser and the second semiconductor laser at both sides of the first and second semiconductor lasers, the photodetectors being provided along an extended line of a line between a light emission position of the first semiconductor laser and a light emission position of the second semiconductor laser (Col. 20, Lines 39-41; Col. 21, Lines 21-27, see Fig. 5, elements 81-83 and 1a-b),

the diffracted light generated from the light beam of the first wavelength by the hologram element and the diffracted light generated from the light beam of the second wavelength by the hologram element are collected at substantially the same position in an area at one of the both sides, part of the plurality of photodetectors being provided at the position (Col. 20, Lines 39-41; Col. 21, Lines 21-27, see Fig. 5, elements 81-83 and 1a-b);

each of the plurality of the photodetectors provided at one side of the both sides and at the other side of the both sides is divided into one or more in a direction substantially parallel to the extended line (see Figs. 9 and 10),

the diffracted light generated from the 0th order main beam of the first wavelength by the hologram element and the diffracted light generated from the 0th order main beam of the second wavelength by the hologram element are collected at substantially the same position in an area at one of the both sides, the photodetectors being provided

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at the position (Col. 20, Lines 39-41; Col. 21, Lines 21-27, see Fig. 5, elements 81-83 and 1a-b), and

signals obtained from the plurality of the photodetectors provided at one side of the both sides and from the plurality of the photodetectors provided at the other side of the both sides are used to obtain a focus error signal and a tracking error signal (Col. 5, Lines 61-67; Col. 8, Lines 47-53).

5. Regarding claim 2, disclose the number of the photodetectors provided at the other side is greater than that of the photodetectors provided at one side (see Fig. 3, *(photodetectors 82 and 83 on one side, photodetector 81 on the other side)*).

6. Regarding claim 3, Komma *et al.* disclose at least one of the photodetectors provided at the other side has a longer dimension in the direction of the extended line than those of the photodetectors provided at the one side (Col. 3, Lines 44-48; *having a photodetecting portion be shared by both wavelengths*, Col. 4, Lines 60-67, *photodetector portion 81 is divided along the x direction as opposed to photodetectors 82 and 83*, see Fig. 8 and Fig. 10, elements 81-83) [See paragraphs [0085] and [0103] of Applicant's Specification (*photodetectors 20 and 21 are integrated thus resulting in longer photodetector 32 that detects both wavelengths*), see Fig. 4(b), elements 20 and 21, and Fig. 5, element 32).]

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7. Regarding claim 5, Komma *et al.* disclose the number of the photodetectors provided at the other side for receiving the diffracted light derived from the 0th order main beam is greater than that of the photodetectors provided at the one side for receiving the diffracted light derived from the 0th order main beam (see Fig. 3, *(photodetectors 82 and 83 on one side, photodetector 81 on the other side)*).

8. Regarding claim 6, Komma *et al.* disclose at least one of the photodetectors provided at the other side for receiving the diffracted light derived from the 0th order main beam has a longer dimension in the direction of the extended line than those of the photodetectors provided at the one side for receiving the diffracted light derived from the 0th order main beam (Col. 3, Lines 44-48; *having a photodetecting portion be shared by both wavelengths*, Col. 4, Lines 60-67, *photodetector portion 81 is divided along the x direction as opposed to photodetectors 82 and 83*, see Fig. 8 and Fig. 10, elements 81-83) [See paragraphs [0085] and [0103] of Applicant's Specification (*photodetectors 20 and 21 are integrated thus resulting in longer photodetector 32 that detects both wavelengths*), see Fig. 4(b), elements 20 and 21, and Fig. 5, element 32).]

9. Regarding claim 7, Komma *et al.* disclose the second wavelength of the light beam of the second semiconductor laser is longer than the first wavelength of the light beam of the first semiconductor laser (Col. 7, Lines 43-44; Col. 8, Line 33).

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10. Regarding claim 8, Komma *et al.* disclose at least a side behind the first semiconductor laser when viewed from the position of the second semiconductor laser, when diffracted light generated by the hologram element from the light beam of the first wavelength reflected by an information recording medium and diffracted light generated by the hologram element from the light beam of the second wavelength reflected by an information recording medium have the same diffraction order, these diffracted light impinge on the same photodetector (Col. 23, Lines 33-36 and 44-54).

11. Regarding claim 9, Komma *et al.* disclose each of the plurality of photodetectors is separated with an interval (see Figs. 9 and 10).

12. Regarding claim 10, Komma *et al.* disclose each of the plurality of photodetectors is separated with an interval (see Figs. 9 and 10).

Response to Arguments

13. Applicant's arguments with respect to claimed invention have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

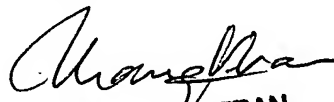
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minerva Rivero whose telephone number is (571) 272-7626. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR 11/9/06


THANG V. TRAN
PRIMARY EXAMINER